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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,078	06/10/2002	Christopher Chang	7050-US-PA	3903

31561 7590 12/23/2003

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

BERCK, KENNETH A

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,078

Applicant(s)

CHANG, CHRISTOPHER

Examiner

Ken A Berck

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Veen et al. (US 5801485).

Regarding claim 1, Van Veen discloses (figs 4 and 5) a field emission display with a cathode substrate (2), a plurality of column lines (3) on the substrate, a resistance layer (column 3, lines 40-50) a resistance layer, covering the column lines, a plurality of gate row lines (7) row lines across the column lines, an insulation layer (4) under the gate row lines to isolate the lines, a plurality of openings in the gate row lines and insulation layer to expose a portion of the resistance layer, a plurality of micro-tips (6) on the resistance layer in the openings and an anode substrate (12) located on the gate row lines to construct a vacuum space.

Regarding claim 2, Van Veen discloses (figs 4 and 5) the cathode substrate includes a glass substrate.

Regarding claim 5, Van Veen discloses (fig 5) the anode substrate includes a fluorescent layer (13) and a conductive layer (14).

Regarding claim 6, Van Veen discloses (fig 5) the micro-tips are cone shaped.

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Claims 1-4, and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Tjaden et al. (US 6012958).

1. AW 12/15/03
Regarding claim ~~2~~, Tjaden discloses (fig 7a) a field emission display with a cathode substrate (600), a plurality of column lines (708) on the substrate, a resistance layer (704) a resistance layer, covering the column lines, a plurality of gate row lines (132) row lines across the column lines, an insulation layer (122) under the gate row lines to isolate the lines, a plurality of openings in the gate row lines and insulation layer to expose a portion of the resistance layer, a plurality of micro-tips (705) on the resistance layer in the openings and an anode substrate located on the gate row lines to construct a vacuum space.

Regarding claim 2, Tjaden discloses (fig 7a) the cathode substrate includes a glass substrate.

Regarding claim 3, Tjaden discloses the resistance layer includes a doped silicon layer (column 4, lines 1-10).

Regarding claim 4, Tjaden discloses (column 2, lines 1-5) the insulation layer includes an oxide layer.

Regarding claim 6, Tjaden discloses (fig 7a) the micro-tips are cone shaped.

Regarding claim 7, Tjaden discloses (fig 7a) the insulation layer has a trench exposing the resistance layer and a plurality of micro-tips in the trench.

Regarding claim 8, Tjaden discloses (fig 7a) the cathode substrate includes a glass substrate.

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Regarding claim 9, Tjaden discloses the resistance layer includes a doped silicon layer (column 4, lines 1-10).

Regarding claim 10, Tjaden discloses (column 2, lines 1-5) the insulation layer includes an oxide layer.

Regarding claim 11, Tjaden discloses (fig 7a) the micro-tips are cone shaped.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

KAB

kab

*Joseph Williams
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